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REMOTE SENSING REFLECTANCE AND THE OPTICAL PROPERTIES OF THE COASTAL AND ESTUARINE WATERS OF LEO-15 DURING JULY 2001

The near-shore waters of LEO-15, and adjacent estuarine environments of Great Bay and Barnegat Bay, New Jersey, were remotely surveyed at 1-2 meter spatial resolution with the PHILLS-1 optical-nir hyperspectral sensor between 23 July and 2 August, 2001. Within this period, a series of ground truth measurements were made by our group and we report here on 15 stations for which a complete set of in-water data is available for cross-check and comparison. Measurements include at surface Remote Sensing Reflectance (Rrs), HPLC pigment, total suspend sediment (organic and inorganic fraction), particle size, and depth profiles of water absorption (both filtered and unfiltered), attenuation and backscatter coefficients. These measurements are used to quantify the water properties of LEO-15 during this time period and to note how the estuarine environment compares to that off-shore. Near-simultaneous PHILLS-1 measurements are available for 5 of the stations. A comparison of PHILLS-1, above water surface measured and HYDROLIGHT modeled Rrs shows generally good agreement with comparable variations noted between any two sets of measurements.

SS7.02, Ocean Color Observations, Urban Ocean
Poster
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